What is claimed is:

1. A water-soluble peptide made by the process comprising the steps of:

providing keratinous material having disulfide linkages;

oxidizing said keratinous material with an oxidizing agent, such that some disulfide linkages are cleaved and oxidized to form sulfonic acid groups;

filtering said oxidized keratinous material and collecting a filtrate;

neutralizing the pH of said filtrate;

adding said filtrate to a water-miscible organic solvent, such that a precipitate is formed;

collecting said precipitate; and

drying said precipitate.

2. A peptide as recited in claim 1, further comprising a concentrating step wherein said filtrate is concentrated before said neutralizing step.

3. A peptide as recited in claim 1, further comprising a concentrating step wherein said filtrate is concentrated after said neutralizing step.

4. A peptide as recited in claim 1, further comprising a concentrating step wherein said filtrate is concentrated before being added to said water-miscible organic solvent.

5. A peptide as recited in claim 4, further comprising a concentrating step wherein said filtrate is concentrated after said neutralizing step.

6. A peptide made by the process comprising the steps of:

providing vertebrate hair having disulfide linkages;

washing said hair in water;

drying said hair in air;

oxidizing said hair with about 2 volume percent peracetic acid, in an amount of about 30 grams of hair to about 500 mL of peracetic acid, at boiling temperature for about 5 hours, such that some disulfide linkages are cleaved and oxidized to form sulfonic acid groups;

filtering said oxidized hair and collecting a filtrate;

concentrating said filtrate about ten-fold by vacuum distillation at about 5 to 10 mm Hg using a pot temperature of about 40 degrees C;

neutralizing said concentrated filtrate pH with about 3 to 4 Normal Ammonium Hydroxide;

adding said neutralized filtrate to methanol, in an amount of about 1 liter of neutralized, concentrated, filtrate to about 6 to 10 liters of methanol, such that a precipitate is formed;

collecting said precipitate; and

drying said precipitate using evaporation without heat application.

7. A peptide as recited in claim 6, wherein said provided vertebrate hair is human hair.

8. A method for making a water-soluble peptide comprising the steps of:

providing a keratinous material having disulfide linkages;

oxidizing said keratinous material with an oxidizing agent, such that some disulfide linkages are cleaved and oxidized, such that water-soluble peptides are formed; and

separating said water-soluble peptides from said keratinous material and collecting said water-soluble peptides.

9. A method for making a water-soluble peptide as recited in claim 8, further comprising the step of drying said collected peptides.

10. A method for making a water-soluble peptide as recited in claim 8, wherein said keratinous material includes human hair.

11. A method for making a water-soluble peptide as recited in claim 10, wherein said oxidizing step produces hydrophilic groups from said cleaved disulfide groups.

12. A method for making a water-soluble peptide comprising the steps of:

providing keratinous material having disulfide linkages;

oxidizing said keratinous material with an oxidizing agent, such that some disulfide linkages are cleaved and oxidized to form sulfonic acid groups;

filtering said oxidized keratinous material and collecting a filtrate;

neutralizing said filtrate;

precipitating said filtrate by adding said filtrate to a water-miscible organic solvent, such that a precipitate is formed;

collecting said precipitate; and

drying said precipitate.

13. A method for making a water-soluble peptide as recited in claim 12, wherein said oxidizing agent is selected from the group consisting of peracetic acid, hydrogen peroxide, peroxy carbonates, ammonium sulfate peroxide, perborates, hypochlorite, chlorine dioxide, sodium and calcium peroxide.

14. A method for making a water-soluble peptide as recited in claim 12, wherein said oxidizing agent is present in a strength of at least about 1 volume percent.

15. A method for making a water-soluble peptide as recited in claim 12, wherein said oxidizing step is carried out at sufficient oxidant concentration and temperature and for sufficient time to provide at least about 5 weight percent of said keratinous material as dried precipitated keratin peptide filtrate.

16. A method for making a water-soluble peptide as recited in claim 12, wherein said oxidizing step is carried out at sufficient oxidant concentration and temperature and for sufficient time to provide at least about 10 weight percent of said keratinous material as dried precipitated keratin peptide filtrate.

17. A method for making a water-soluble peptide as recited in claim 12, wherein said oxidizing step is carried out at sufficient oxidant concentration and temperature and for sufficient time to provide at least about 15 weight percent of said keratinous material as dried precipitated keratin peptide filtrate.

18. A method for making a water-soluble peptide as recited in claim 12, wherein said oxidizing step is carried out at sufficient oxidant concentration and temperature and for sufficient time to provide about 20 weight percent of said keratinous material as dried precipitated keratin peptide filtrate.

19. A method for making a water-soluble peptide as recited in claim 12, wherein said oxidizing step is carried out at in at least 1 volume percent of an oxidizing agent selected from the group consisting of peracetic acid and hydrogen peroxide, wherein said oxidizing step is carried out at boiling temperature and for at least about 2 hours.

20. A method for making a water-soluble peptide as recited in claim 19, wherein said oxidizing step is carried out for at least about 4 hours.

21. A method for making a water-soluble peptide as recited in claim 12, wherein said oxidizing step is carried at a temperature of at least about 90 degrees C and for at least about 5 hours.

22. A method for making a water-soluble peptide as recited in claim 12, wherein sufficient disulfide linkages are cleaved in said oxidizing step to produce a soluble form of keratin.

23. A method for making a water-soluble peptide as recited in claim 12, wherein said keratin material includes human hair.

24. A method for making a water-soluble peptide as recited in claim 12, wherein, at said precipitating step, said filtrate has a concentration of between about 3 and about 15 grams of soluble peptides per liter, and between about 5 and about 34 liters of said water miscible organic solvent is used per gram of soluble peptides in said liter.

25. A method for making a water-soluble peptide as recited in claim 12, wherein, at said precipitating step, said filtrate has a concentration of between about 3 and about 15 grams of soluble peptides per liter, and between about 60 and about 100 liters of said water miscible organic solvent is used per liter of filtrate.

26. A method for making a water-soluble peptide as recited in claim 12, wherein, said filtrate is concentrated after said filtration, and, at said precipitating step,

has a concentration of between about 30 and about 150 grams of soluble peptides per liter, and between about 6 and about 10 liters of said solvent is used per liter of concentrated filtrate.

27. A method for making said water-soluble peptide as recited in claim 12, wherein said filtrate is concentrated after said neutralizing step.

28. A method for making said water-soluble peptide as recited in claim 12, wherein said filtrate is concentrated before being added to said water-miscible organic solvent.

29. A method for making said water-soluble peptide as recited in claim 12, wherein said solvent is selected from the group consisting of methanol, ethanol, acetone, and tetrahydrofuran.

30. A water-soluble peptide comprising a peptide chain having between about 5 and about 15 amino acids and having at least one ionizable pendant group at physiological pH.

31. A water-soluble peptide as recited in claim 30, wherein said ionizable pendant group is sulfonic acid.

32. A water-soluble peptide as recited in claim 30, wherein said peptide is about 10 amino acids long and derived from keratin and said ionizable pendant group is sulfonic acid.

33. A water-soluble peptide as recited in claim 30, wherein about 90% of said peptides fall between about 300 and about 1300 daltons in molecular weight and are derived from keratin and said ionizable pendant group includes sulfonic acid.

34. A water-soluble peptide as recited in claim 30, wherein said peptide has a mean molecular weight of about 850 daltons.

35. A method for treating a wound comprising the steps of:

providing a water-soluble peptide having between about 5 and about 15 amino acids and having at least one ionizable pendant group at physiological pH; and

applying said peptide to said wound.

36. A method for treating a wound as recited in claim 35, wherein said providing step provides ionizable pendant groups including sulfonic acid.

37. A method for treating a wound as recited in claim 35, wherein said providing step includes said peptide having a mean molecular weight of about 850 daltons and wherein said providing step ionizable pendant groups includes sulfonic acid.

38. A method for treating a wound comprising the steps of:

providing a wound healing agent consisting essentially of a water-soluble peptide having between about 5 and about 15 amino acids and having at least one ionizable pendant group at physiological pH; and

applying said wound healing agent to said wound.

39. A method for treating a wound comprising the steps of:

providing a wound-healing agent consisting essentially of a product made by the process including the steps of

providing hair having disulfide linkages,

oxidizing said hair with an oxidizing agent, such that some disulfide linkages are cleaved and oxidized to form sulfonic acid groups,

filtering said oxidized hair and collecting a filtrate,

neutralizing the pH of said filtrate,

adding said filtrate to a water-miscible organic solvent such that a precipitate is formed,

collecting said precipitate, and

drying said precipitate; and

applying said wound healing agent to said wound.

40. A method for treating a wound as recited in claim 39, wherein said method does not include applying a substance which substantially chemically alters said wound healing agent.

41. A method for treating a wound as recited in claim 39, further comprising combining said dried precipitate with a water-based formulation.

42. A method for treating a wound as recited in claim 39, further comprising applying said precipitate to a wound dressing.

43. A method for treating a wound as recited in claim 39, wherein said wound healing agent applied to said wound is formed of pure keratin.

44. A method for treating a wound as recited in claim 39, wherein said wound healing agent is added to a keratin sheet prior to being applied to said wound.

45. A method for treating a wound as recited in claim 39, wherein said wound healing agent is added to a keratin hydrogel prior to being applied to said wound.

46. A method for treating a wound as recited in claim 39, wherein said hair includes human hair.

47. A composition for topical application to skin made by the process comprising the steps of:

providing hair having disulfide linkages;

oxidizing said hair with an oxidizing agent, such that some disulfide linkages are cleaved and oxidized to form sulfonic acid groups;

filtering said oxidized hair and collecting a filtrate;

neutralizing the pH of said filtrate;

adding said filtrate to a water-miscible organic solvent such that a precipitate is formed;

collecting said precipitate;

drying said precipitate; and

mixing said precipitate with a carrier selected from the group consisting of lotions, creams, and gels.

48. A composition as recited in claim 47, wherein said hair includes human hair.

49. A tissue engineered implant comprising a keratin scaffold including therein a keratin peptide made by the process comprising the steps of:

providing hair with disulfide linkages,

oxidizing said hair with an oxidizing agent, such that some disulfide linkages are cleaved and oxidized to form sulfonic acid groups,

filtering said oxidized hair and collecting a filtrate,

neutralizing the pH of said filtrate,

adding said filtrate to a water-miscible organic solvent such that a precipitate is formed,

collecting said precipitate, and

drying said precipitate, wherein said peptide is disposed within said keratin scaffold to act as a cell stimulant.

50. A tissue engineered implant as recited in claim 49, wherein said hair includes human hair.

51. A method for treating keratinous tissue comprising the steps of:

providing a wound-healing agent consisting essentially of a product made by the process including the steps of

providing hair with disulfide linkages,

oxidizing said hair with an oxidizing agent, such that some disulfide linkages are cleaved and oxidized to form sulfonic acid groups,

filtering said oxidized hair and collecting a filtrate,

neutralizing the pH of said filtrate,

adding said filtrate to a water-miscible organic solvent such that a precipitate is formed,

collecting said precipitate, and

drying said precipitate; and

applying said tissue healing agent to said keratinous tissue.

52. A method for treating keratinous tissue as recited in claim 51, wherein said tissue forms part of a gastro-intestinal tract and said applying step includes ingesting said tissue healing agent.

53. A method for treating keratinous tissue as recited in claim 51, wherein said hair includes human hair.

54. A method for treating keratinous tissue as recited in claim 51, wherein said tissue forms a part of a gastro-intestinal tract and said applying step includes intravenously injecting said tissue healing agent.